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09/724,289	11/28/2000	David M. Bankers	L294.12-0010	7557
164	7590 08/24/2006		EXAMINER	
KINNEY & LANGE, P.A.			VU, NGOC K	
THE KINNEY & LANGE BUILDING 312 SOUTH THIRD STREET		ART UNIT	PAPER NUMBER	
MINNEAPO	LIS, MN 55415-1002		2623	
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Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)	
Office Action Summan	09/724,289	BANKERS ET AL.	
Office Action Summary	Examiner	Art Unit	
	Ngoc K. Vu	2623	_
The MAILING DATE of this communication Period for Reply	appears on the cover sheet w	ith the correspondence address	_
A SHORTENED STATUTORY PERIOD FOR RE WHICHEVER IS LONGER, FROM THE MAILING - Extensions of time may be available under the provisions of 37 CFI after SIX (6) MONTHS from the mailing date of this communication - If NO period for reply is specified above, the maximum statutory pe - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS COMMUNI R 1.136(a). In no event, however, may a . riod will apply and will expire SIX (6) MOI atute, cause the application to become A	CATION. reply be timely filed VTHS from the mailing date of this communication BANDONED (35 U.S.C. § 133)	
Status			
1)⊠ Responsive to communication(s) filed on 2	6 May 2006		
	This action is non-final.		
3)☐ Since this application is in condition for allo		ters prosecution as to the morite is	
closed in accordance with the practice und			
Disposition of Claims	ox, panto quajio, 1000 0.2	. 11, 100 0.0. 210.	
4)⊠ Claim(s) <u>1-29</u> is/are pending in the applicat	ion		
4a) Of the above claim(s) is/are with			
5) Claim(s) is/are allowed.	diawii iioiii consideration.		
6)⊠ Claim(s) <u>1-29</u> is/are rejected.			
7)☐ Claim(s) is/are objected to.			
8) Claim(s) are subject to restriction an	d/or election requirement	•	
•	aror election requirement.		
Application Papers			
9)☐ The specification is objected to by the Exam	niner.		
10) The drawing(s) filed on is/are: a) = a	accepted or b) objected to	by the Examiner.	
Applicant may not request that any objection to	the drawing(s) be held in abeya	nce. See 37 CFR 1.85(a).	
Replacement drawing sheet(s) including the cor	rection is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).
11) The oath or declaration is objected to by the	Examiner. Note the attached	d Office Action or form PTO-152.	
riority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:	ign priority under 35 U.S.C.	119(a)-(d) or (f).	
1. Certified copies of the priority docum	ents have been received.		
2. Certified copies of the priority docum		onlication No	
3. Copies of the certified copies of the p			
application from the International Bur		Todal III and Nadonal Glage	
* See the attached detailed Office action for a		received.	
ttachment(s)			
Notice of References Cited (PTO-892)	4) Interview S	Summary (PTO-413)	
Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/		s)/Mail Date nformal Patent Application (PTO-152)	
Paper No(s)/Mail Date	6) Other:		

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Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/26/2006 has been entered.

Response to Arguments

2. Applicant's arguments filed 5/26/2006 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

3. Claim 1 is objected to because of the following informalities: the terms "a schedule containing both (a) television programs available for viewing and (b) recording and previously recorded television programs available for time-shifted viewing" in lines 4-6 are vague. (Emphasis added). These terms appear referring to "a schedule containing both (a) television programs available for viewing and recording and (b) previously recorded television programs available for time-shifted viewing". Appropriate correction is required.

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 1-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis et al. (US 20030149988 A1) in view of Gopinath (US 5,990,885 A).

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Regarding claim 1, Ellis discloses a method of guest-selected recording of television programs in an entertainment system (see figures 2a-d) having a head end (16) and a plurality of terminals (22) connected by a distribution system (via 20), the method comprising:

creating, at the headed, a schedule (program guide as shown in figures 11a-11c, 14d-14e and 18b-18d) containing both television programs available for viewing and recording and previously recorded television programs available for time-shifted viewing (the program guide comprises program listings available for viewing and recording and viewing the recorded programs - see 0064, 0125, 0126, 0145, 0146);

transmitting, from the headend to a terminal, television signals representing the schedule (program guide) created (it is noted that the program guide is transmitted on a television channel sideband, in the vertical blanking interval of a television channel, using an in-band digital signal, or by any other suitable data transmission technique. Therefore, the program guide is a part of television signals - see 0064; 0125-0126 and 0156):

transmitting, from the terminal to the head end, program recording selection data representing a program selected by a viewer for recording (see 0076 and 0084);

creating, at the headend (via processing circuitry 11), a digital file representing the program selected (encoding program as digital file – see 0089 and figures 2a-5);

storing, at the headend, the digital file (in storage 15 - see 0079; 0089);

updating, at the headend, the schedule of television programs to include the program corresponding to the digital file (it must be understood that the program guide is updated in order to schedule appropriately the programs including the program corresponding to the digital file; see 0089 and 0120);

transmitting the schedule as updated, in the form of television signals, from the headend to the terminal (it is noted that the program guide is transmitted on a television channel

sideband, in the vertical blanking interval of a television channel, using an in-band digital signal, or by any other suitable data transmission technique. Therefore, the program guide is a part of television signals - see 0064; 0097 and 0121);

transmitting, from the terminal to the head end, data requesting playback of the program selected for recording based upon a selection of that program from the schedule as updated (viewer transmits a request for playback a selected program for recording – 0151, 0156);

playing back, at the headend, the program selected based upon the digital file representing the program selected (the remote server 24 may playback the selected program in response to playback requested from user – see 0156); and

transmitting the program being played back to the terminal (see 0156 and 0157).

Ellis's system allows viewers in a plurality of locations to direct the headend, i.e., server, to record certain programs that later may be play back to the viewer on demand. Ellis does not explicitly teach that the entertainment system at a lodging facility and the plurality of terminals in a plurality of guest rooms. However, Gopinath teaches providing personalized services to viewers in hotel environment. For example, when a guest selects a movie using his in-room guest appliance and remote control, the requested movie is delivered from server to the guest's TV (see figures 1-2; col. 7, lines 39-58). Gopinath further discloses that after dinner, the guest decides to watch a movie on his in-room TV. He browses the selections in the movie guide from a personalized list of recommendations based upon his preference list and selections from past hotel stays. He begins watching a selected movie, but he stops the movie before it is finished so he may retire for the night. In the next morning, he is able to finish watching the movie from the previous night (see col. 1, lines 55-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the entertainment system of Ellis by providing personalized services, i.e., movie, to viewers in hotel environment as disclosed by

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Gopinath in order to allow the guest to selectively watch movie from a personalized list at his convenience.

Regarding claim 8, Ellis discloses a method of guest-selected recording of television programs in an entertainment system (see figures 2a-d) having a head end (16) and a plurality of terminals (22) connected by a distribution system (via 20), the method comprising:

transmitting, from a headend (16) to a terminal, television signals representing a program schedule (program guide) (it is noted that the program guide is transmitted on a television channel sideband, in the vertical blanking interval of a television channel, using an inband digital signal, or by any other suitable data transmission technique. Therefore, the program guide is a part of television signals – see 0064) containing both scheduled programs available for viewing and recording and previously recorded television programs available for time-shifted viewing (program guide contains programs scheduled for recording and viewing and previously recorded programs stored in remote server 24 for playback on-demand – see 0125-0126 and 0156);

receiving, from the terminal, program selection data representing in a scheduled program selected for recording (see 0076 and 0084);

digitally storing the program selected, at the headend, when it is broadcast (in storage 15 of remote server 24 – see 0079; 0089);

updating the schedule, at the headend, to include the program selected as one of the previously recorded programs (it must be understood that the program guide is updated in order to schedule appropriately the programs including the previously recorded program - see 0089; 0120; 0156 and figures 11b-11c);

receiving at the headend, from the terminal request data based on the previously recorded programs contained in the program schedule (receiving request from user for playback a previously recorded program contained in the program guide – see 0156);

converting at the headend, in response to the playback request data, the digitally stored program to television signals (converting program to suitable video signal for distribution - see 0077); and

transmitting the television signals from the headend to the terminal (see 0157).

Ellis's system allows viewers in a plurality of locations to direct the headend, i.e., server, to record certain programs that later may be play back to the viewer on demand. Ellis does not explicitly teach that the system comprises a guest terminal in a guest room in a lodging facility. However, Gopinath teaches providing personalized services to viewers in hotel environment. For example, when a guest selects a movie using his in-room guest appliance and remote control, the requested movie is delivered from server to the guest's TV (see figures 1-2; col. 7, lines 39-58). Gopinath further discloses that after dinner, the guest decides to watch a movie on his in-room TV. He browses the selections in the movie guide from a personalized list of recommendations based upon his preference list and selections from past hotel stays. He begins watching a selected movie, but he stops the movie before it is finished so he may retire for the night. In the next morning, he is able to finish watching the movie from the previous night (see col. 1, lines 55-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the entertainment system of Ellis by providing personalized services, i.e., movie, to viewers in hotel environment as disclosed by Gopinath in order to allow the guest to selectively watch movie from a personalized list at his convenience.

Regarding claims **15, 24 and 29**, Ellis discloses an entertainment system comprising: a plurality of terminals (22);

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a distribution system (20) connected to the terminals; and

a headend (16) comprising:

a digital a content server (24) for storing entertainment content in digital files and supplying to the distribution system television signals based upon the digital files (see 0077 and 0089);

a receiver (within 21) for receiving television programs on a plurality of channels and supplying the programs to the distribution system (see 0064-0065);

an encoder (within 11) for converting (encoding) a selected television program on one of the channels to digital file representing the selected program and transferring the digital file to the digital content server (storage 15 in server 24) for storage (see 0088; 0089); and

a computer (11) which communicates with the terminals (22) over the distribution system (20), the computer providing the terminals with television signals representing a schedule (program guide) (it is noted that the program guide is transmitted on a television channel sideband, in the vertical blanking interval of a television channel, using an in-band digital signal, or by any other suitable data transmission technique. Therefore, the program guide is a part of television signals – see 0064) listing both the television programs available for viewing and recording and previously recorded programs available for time-shifted viewing (program guide contains programs scheduled for recording and viewing and recorded programs stored in remote server 24 – see 0064 and 0125-0126), controlling operation of the encoder based upon a selection by a viewer of a program to be recorded (in response to request for recording a selected program) and controlling operation of the digital content server based upon a selection by a viewer of a previously recorded program for time-shifted viewing (in response to request for playback a previously recorded program) (see 0077, 0088, 0089 and 0156-0157).

Ellis's system allows viewers in a plurality of locations to direct the headend, i.e., server, to record certain programs that later may be play back to the viewer on demand. Ellis does not explicitly teach that the system comprises a guest terminal in a guest room in a lodging facility. However, Gopinath teaches providing personalized services to viewers in hotel environment. For example, when a guest selects a movie using his in-room guest appliance and remote control, the requested movie is delivered from server to the guest's TV (see figures 1-2; col. 7, lines 39-58). Gopinath further discloses that after dinner, the guest decides to watch a movie on his in-room TV. He browses the selections in the movie guide from a personalized list of recommendations based upon his preference list and selections from past hotel stays. He begins watching a selected movie, but he stops the movie before it is finished so he may retire for the night. In the next morning, he is able to finish watching the movie from the previous night (see col. 1, lines 55-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the entertainment system of Ellis by providing personalized services, i.e., movie, to viewers in hotel environment as disclosed by Gopinath in order to allow the guest to selectively watch movie from a personalized list at his convenience.

Further regarding claim 24, Ellis discloses that wherein the terminals are capable of receiving and displaying an interactive scheduled in the form of television signals and does not require the conversion of a digital file by the guest terminal to display the interactive schedule (it is noted that the program guide is transmitted on a television channel sideband, in the vertical blanking interval of a television channel, using an in-band digital signal, or by any other suitable data transmission technique. Therefore, the program guide is a part of television signals - see 0064, 0121).

Regarding claim **21**, Ellis discloses a method of providing viewer-selected viewing of time-shifted television programs in an entertainment system (see figures 2a-d) having a head

end (16) and a plurality of terminals (22) connected by a distribution system (via 20), the method comprising:

tuning to channels on which scheduled television programs selected for time-shifting are carried (see 0088);

encoding the program into a digital format to create a digital file (see 0088 and 0089); storing the digital files at the headend (in storage 15 of remote server 24 in facility 16 see 0079; 0089);

transmitting, from the headend to a terminal, television signals representing an interactive schedule (program guide) (it is noted that the program guide is transmitted on a television channel sideband, in the vertical blanking interval of a television channel, using an inband digital signal, or by any other suitable data transmission technique. Therefore, the program guide is a part of television signals - see 0064) listing both scheduled programs available for viewing and previously recorded television programs available for time-shifted viewing based upon the digital files stored (program guide contains programs scheduled for viewing and previously recorded programs stored in remote server 24 for playback on-demand - see 0064 and 0125-0126);

transmitting, from the terminal to the headend, data requesting playback of one of the time-shifted television programs displayed (receiving request transmitted from user for playback a selected program stored in the remote server 24 – see 0156);

playing back the time-shifted program requested based upon the stored digital file representing that program (the remote server 24 may playback the requested recorded program in response to playback requested from user - see 0156); and

transmitting the time-shifted program being played back to the terminal (see 0156 and 0157).

Ellis's system allows viewers in a plurality of locations to direct the headend, i.e., server, to record certain programs that later may be play back to the viewer on demand. Ellis does not explicitly teach that the system comprises a guest terminal in a guest room in a lodging facility. However, Gopinath teaches providing personalized services to viewers in hotel environment. For example, when a guest selects a movie using his in-room guest appliance and remote control, the requested movie is delivered from server to the guest's TV (see figures 1-2; col. 7, lines 39-58). Gopinath further discloses that after dinner, the guest decides to watch a movie on his in-room TV. He browses the selections in the movie guide from a personalized list of recommendations based upon his preference list and selections from past hotel stays. He begins watching a selected movie, but he stops the movie before it is finished so he may retire for the night. In the next morning, he is able to finish watching the movie from the previous night (see col. 1, lines 55-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the entertainment system of Ellis by providing personalized services, i.e., movie, to viewers in hotel environment as disclosed by Gopinath in order to allow the guest to selectively watch movie from a personalized list at his convenience.

Regarding claim 22, Ellis discloses a method of providing time-shifted television programs in an entertainment system (see figures 2a-d) having a head end (16) and a plurality of terminals (22) connected by a distribution system (via 20), the method comprising:

digitally storing, at the headend, television programs (in storage 15 of remote server 24) for time-shifted viewing (i.e., playback on-demand), when they are broadcast (see 0079, 0089 and 0157);

transmitting, from the headend to a terminal, television signals representing a schedule (program guide) (it is noted that the program guide is transmitted on a television channel sideband, in the vertical blanking interval of a television channel, using an in-band digital signal,

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or by any other suitable data transmission technique. Therefore, the program guide is a part of television signals – see 0064) containing both scheduled programs available for viewing and recording, and time-shifted television programming based upon television programs digitally stored (program guide contains programs scheduled for recording and viewing and recorded programs stored in remote server 24 – see 0064 and 0125-0126);

receiving at the headend, from the terminal, playback request data selecting one of the digitally stored time-shifted television programs (receiving request from user for playback a selected program stored in the remote server 24 – see 0156);

converting at the headend, in response to the playback request data, the selected digitally stored time-shifted television program to television signals (converting program to suitable video signal for distribution - see 0077); and

transmitting the television signals from the heandend to the terminal (see 0157).

Ellis's system allows viewers in a plurality of locations to direct the headend, i.e., server, to record certain programs that later may be play back to the viewer on demand. Ellis does not explicitly teach that the entertainment system at a lodging facility and the plurality of terminals in a plurality of guest rooms. However, Gopinath teaches providing personalized services to viewers in hotel environment. For example, when a guest selects a movie using his in-room guest appliance and remote control, the requested movie is delivered from server to the guest's TV (see figures 1-2; col. 7, lines 39-58). Gopinath further discloses that after dinner, the guest decides to watch a movie on his in-room TV. He browses the selections in the movie guide from a personalized list of recommendations based upon his preference list and selections from past hotel stays. He begins watching a selected movie, but he stops the movie before it is finished so he may retire for the night. In the next morning, he is able to finish watching the movie from the previous night (see col. 1, lines 55-67). Therefore, it would have been obvious to one of ordinary

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skill in the art at the time the invention was made to modify the entertainment system of Ellis by providing personalized services, i.e., movie, to viewers in hotel environment as disclosed by Gopinath in order to allow the guest to selectively watch movie from a personalized list at his convenience.

Regarding claims **2**, **9 and 23**, Ellis discloses tuning to a channel on which a television program is carried; and encoding the program into a digital format to create a digital file (see 0075, 0088 and 0089).

Regarding claims **3 and 11**, Ellis shows creating a recording schedule based upon program recording selection data received (see 0125-0126).

Regarding claim **4**, Ellis discloses creating a digital file (directory) is based upon the recording schedule (see 0145).

Regarding claims **5 and 10**, Ellis discloses associating with the digital file an identification of the terminal (user1, user 2...etc) that provided the program recording selection data (see figure 4 and 0082; 0091).

Regarding claims **6 and 13**, Ellis shows that the schedule of television programs is an interactive program guide (see figures 14b, 14d, 14e and 15a-18c).

Regarding claims **7, 14 and 17,** Ellis discloses that the program recording selection data is produced based upon a selection (i.e., recording a program) made on the interactive program guide (see 0134).

Regarding claim **12**, Ellis discloses digitally storing the program is based upon the recording schedule (see 0079 and 0089).

Regarding claims **16 and 25**, Ellis discloses that the system includes a plurality of tuners for tuning to the channels and an encoding device connected to each tuner (see 0088-0089).

Regarding claim 18, Ellis shows that the interactive program guide includes

information about previously recorded television programs (see 0145, 0156).

Regarding claims **19 and 26**, Ellis discloses that in response to a request from a terminal, the computer causes the digital content server (24) to supply television signals based upon the digital file representing the selected program (see 0089; 0091).

Regarding claims **20 and 27**, Ellis discloses that the computer creates a recording schedule for the encoder based upon data from the terminals representing selections by viewers of programs to be recorded (see 0088; 0125-0126).

Regarding claim 28, Ellis discloses a method of providing viewer-selected viewing of time-shifted television programs in an entertainment system (see figures 2a-d) having a head end (16) and a plurality of terminals (22) connected by a distribution system (via 20), the method comprising:

creating, at the headend, a recording schedule of a television programs to be recorded for time-shifted viewing (see 0125-0126);

encoding, at the headend, television programs based upon the recording schedule to create a digital files representing time-shifted television programs (see 0088 and 0089);

storing the digital files at a headend (in storage 15 of remote server 24 in facility 16 – see 0079; 0089);

transmitting, from the headend to a terminal, television signals representing an interactive schedule (program guide) (it is noted that the program guide is transmitted on a television channel sideband, in the vertical blanking interval of a television channel, using an inband digital signal, or by any other suitable data transmission technique. Therefore, the program guide is a part of television signals – see 0064) listing both scheduled programs available for viewing and recording and time-shifted television programs available for viewing based upon the digital files stored (program guide contains programs scheduled for viewing and previously

recorded programs stored in remote server 24 for playback on-demand – see 0064 and 0125-0126);

transmitting, from the terminal to the headend, a request to view one of the time-shifted television programs (receiving request transmitted from user for playback a selected program stored in the remote server 24 – see 0156); and

transmitting, from the head end to the terminal, the time-shifted television program requested based upon the digital file representing that time-shifted television program (the selected program is transmitted to the user from the remote server 24 in facility 16 - see 0156 and 0157).

Ellis's system allows viewers in a plurality of locations to direct the headend, i.e., server, to record certain programs that later may be play back to the viewer on demand. Ellis does not explicitly teach that the entertainment system at a lodging facility and the plurality of terminals in a plurality of guest rooms. However, Gopinath teaches providing personalized services to viewers in hotel environment. For example, when a guest selects a movie using his in-room guest appliance and remote control, the requested movie is delivered from server to the guest's TV (see figures 1-2; col. 7, lines 39-58). Gopinath further discloses that after dinner, the guest decides to watch a movie on his in-room TV. He browses the selections in the movie guide from a personalized list of recommendations based upon his preference list and selections from past hotel stays. He begins watching a selected movie, but he stops the movie before it is finished so he may retire for the night. In the next morning, he is able to finish watching the movie from the previous night (see col. 1, lines 55-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the entertainment system of Ellis by providing personalized services, i.e., movie, to viewers in hotel environment as disclosed by

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Gopinath in order to allow the guest to selectively watch movie from a personalized list at his

convenience.

Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner

should be directed to Ngoc K. Vu whose telephone number is 571-272-7306. The examiner can

normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, John W. Miller can be reached on 571-272-7353. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

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Ngoc K. Vu

Primary Examiner

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August 21, 2006